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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/539,579	06/17/2005	Marco Sernesi	2545-0476	4332

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HARBIN, KING & KILMA  
500 NINTH STREET SE  
WASHINGTON, DC 20003

EXAMINER
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MAYE, AYUB A

ART UNIT	PAPER NUMBER
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4123

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/539,579	<b>Applicant(s)</b> SERNESI ET AL.	
	<b>Examiner</b> Ayub A. Maye	<b>Art Unit</b> 4123	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. ____.                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>06/17/2005</u> .  | 6) <input type="checkbox"/> Other: ____.                          |

### **DETAILED ACTION**

This is the initial Office action based on the 10539579 application filed June, 17, 2005. Claims 1-19, as originally filled, are currently pending and have been considered below.

#### ***Specification***

1. The disclosure is objected to because of the following informalities: claims 1-5, 8, 12-13, 15 and specification are objected because of the use of 'CCD' without an explanation of what the initials stand for, it should be spelled out at least once in the claims and the specification.

Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1-4, 8-14, 17-19 rejected under 35 U.S.C. 102(e) as being unpatentable by Heuft et al (20050045263).

For claim 1, Heuft discloses that a labelling and/or marking machine (p.3, line 1) comprising a feed conveyor rotatable about a vertical axis and equipped peripherally with a plurality of pedestals supporting single containers (p.21,line 2-4); drive means associated respectively with the conveyor, by which the containers are directed along a predetermined conveying path (p.12,line 3-6), and with the single pedestals in such a way that each pedestal can be driven in rotation about a respective vertical axis (p.21,line 2-5); applicator and/or marker means occupying positions along the predetermined conveying path (p.30,line 7-9)(fig.1); and means by which to detect and control the angular position of the containers, characterized in that the detection and control means (p.13,line 11-16) comprise at least one CCD image sensor capable of detecting and recognizing predetermined outlines presented by the containers (p.31,line 5-7).

As for claim 2, Heuft discloses that wherein the CCD image sensors comprise a memory by means of which to store at least the shape of one reference sample outline (p.12,line 2-3), and respective sensing and control means serving to measure the degree of similarity between the reference sample outline and the detected outline (32)(p.12,line 3-6).

Heuft shows that CCD capable for recording but did not state that CCD having memory and storing shapes. However, it is inherent that CCD has memory and is capable of storing shapes because the CCD of Heuft is.

As for claim 3 and 12, Heuft discloses that a master control unit connected on the input side to the CCD image sensor (p.31,line 5-7), and on the output side to the drive means associated respectively with the conveyor and with each of the pedestals (p.31,line 2-4).

As for claims 4 and 13, Heuft discloses that a CCD image sensor occupying a fixed position relative to the rotating feed conveyor (p.29,line 2-3)(fig.1,item 18).

As for claim 8, Heuft discloses that wherein the master control unit (36) receives a signal from the CCD image sensor indicating the angular position of the predetermined outline presented by a respective container relative to the conveyor (p.12,line 2-6), and responds by sending a control signal to the drive means associated with the pedestal supporting a container, such as will cause the pedestal to rotate through a predetermined angle and into a position coinciding with a predetermined position programmed by way of the labelling and/or marking means (p.13,line 3-9).

As for claim 9, Heuft discloses that wherein the master control unit is designed to respond, once the pedestal has reached the predetermined position programmed by way of the labelling and/or marking means, by deactivating the drive means associated with the pedestal (8) (p.15,line 1-8).

As for claims 10 and 18, Heuft discloses that wherein the applicator means positioned along the predetermined conveying path comprise at least one device such as will affix a label to a predetermined area of the lateral surface presented by each container (p.30,line 7-9)(fig.1,item 24).

As for claims 11 and 19, Heuft discloses that wherein the marker means positioned along the predetermined conveying path comprise at least one device such as will apply lettering and/or an image and/or a logo or graphic symbol to a predetermined area of the lateral surface presented by each container (p.17,line 7-10) (fig.1, item 24).

As for claims 14, and 17, Heuft discloses that wherein the rotating conveyor is set in motion intermittently through the agency of respective drive means (p.15, line 1-8).

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 1-4, 8-14, 17-19 rejected under 35 U.S.C. 103(a) as being unpatentable over Bright et al (5858143) in view of Douglas et al (5926556).

For claim 1, Bright discloses that a labelling and/or marking machine (col.3, line 3- 4) comprising a feed conveyor rotatable about a vertical axis and equipped peripherally with a plurality of pedestals supporting single containers (col.1,line 13-15); drive means associated respectively with the conveyor, by which the containers are directed along a predetermined conveying path (col.3,line 23-24), and with the single pedestals in such a way that each pedestal can be driven in rotation about a respective vertical axis (col.7,line 58-60); applicator and/or marker means occupying positions along the predetermined conveying path (fig.3, Items 35B,35F); and means by which to detect and control the angular position of the containers, characterized in that the detection and control means (col.3,line 29-34). As for claim 8, Bright discloses that the master control unit responds by sending a control signal to the drive means associated with the pedestal supporting a container, such as will cause the pedestal to rotate through a predetermined angle and into a position coinciding with a predetermined position programmed by way of the labelling and/or marking means (col.3,line 29-38).

As for claim 9, Bright discloses that wherein the master control unit is designed to respond, once the pedestal has reached the predetermined position programmed by way of the labelling and/or marking means, by deactivating the drive means associated with the pedestal (col.3,line 29-38).

As for claims 10 and 18, Bright discloses that wherein the applicator means positioned along the predetermined conveying path (fig.3,Items 35B,35F) comprise at least one device such as will affix a label to a predetermined area of the lateral surface presented by each container (col.21,line 1-5). As for claims 11 and 19, Bright discloses that wherein the marker means positioned along the predetermined conveying path (fig.3, Items 35B,35F) comprise at least one device such as will apply lettering and/or an image and/or a logo or graphic symbol to a predetermined area of the lateral surface presented by each container (col.19,line 50-52)(fig.18,19).

As for claims 14, and 17, Bright discloses that wherein the rotating conveyor is set in motion intermittently through the agency of respective drive means (p.15, line 1-8)(col.7,line 56-60).

However, Bright fails to teach what type CCD image sensor that is capable of detecting and recognizing predetermined outlines presented by the containers, wherein the CCD image sensors comprise a memory by means of which to store at least the shape of one reference sample outline, and respective sensing and control means serving to measure the degree of similarity between the reference sample outline and the detected outline, master control unit connected on the input side to the CCD image sensor and on the output side to the drive means associated respectively



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with the conveyor and with each of the pedestals, a CCD image sensor occupying a fixed position relative to the rotating feed conveyor and wherein the master control unit receives a signal from the CCD image sensor indicating the angular position of the predetermined outline presented by the respective container relative to the conveyor.

For claim 1, Douglas teaches that CCD image sensor that is capable of detecting and recognizing predetermined outlines presented by the containers (col.2,line 11-21). For claim 2, Douglas teaches that wherein the CCD image sensors comprise a memory by means of which to store at least the shape of one reference sample outline, and respective sensing and control means serving to measure the degree of similarity between the reference sample outline and the detected outline (col.2,line 46-60). As for claims 3 and 12, Douglas teaches that master control unit connected on the input side to the CCD image sensor (col.5,line 61-65) and on the output side to the drive means associated respectively with the conveyor and with each of the pedestals (col.5,line 30-41)(fig.1,item 10) examiner notes that even though Douglas did not give enough detail about input and output but system 10 is the connection between the CCD image sensor and the conveyor. As for claim 4 and 13, Douglas teaches that a CCD image sensor occupying a fixed position relative to the rotating feed conveyor (col.5, line 44-50). As for claim 8, Douglas teaches that wherein the master control unit receives a signal from the CCD image sensor indicating the angular position of the predetermined outline presented by the respective container relative to the conveyor (col.6,line 66-67)(col.7,line 1-9).

It would have been obvious to one ordinary skill in the labeling art to have modified Bright with the use of CCD image sensor for the detecting the image of the label and mark as taught by Douglas because CCD image sensor brings high level and better quality of image sensor from signal instead of just sensor without image from signal and also makes the process of label faster and reliable.

***Allowable Subject Matter***

4. Claims 5-7, 15-16 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. The following is a statement of reasons for the indication of allowable subject matter: the prior art fails to teach or suggest the use of multiple CCD image sensors mounted to the feed of the conveyor instead of just one and that each associated with a relative pedestal.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ayub A. Maye whose telephone number is 571-270-5037. The examiner can normally be reached on Monday-Friday 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joe Del Sole can be reached on 571-272-1130. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AM

/Joseph S. Del Sole/  
Supervisory Patent Examiner, Art Unit 4123